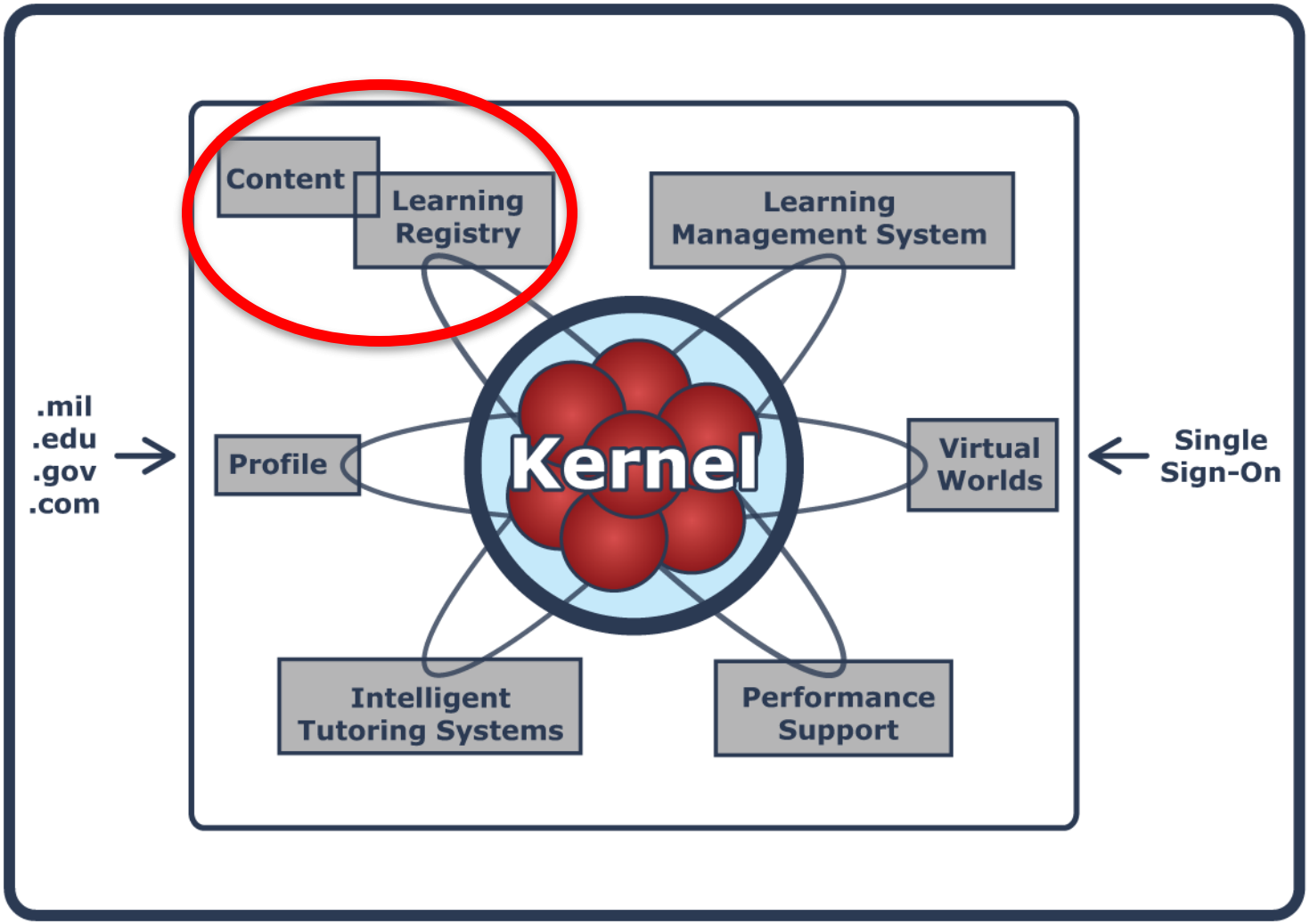
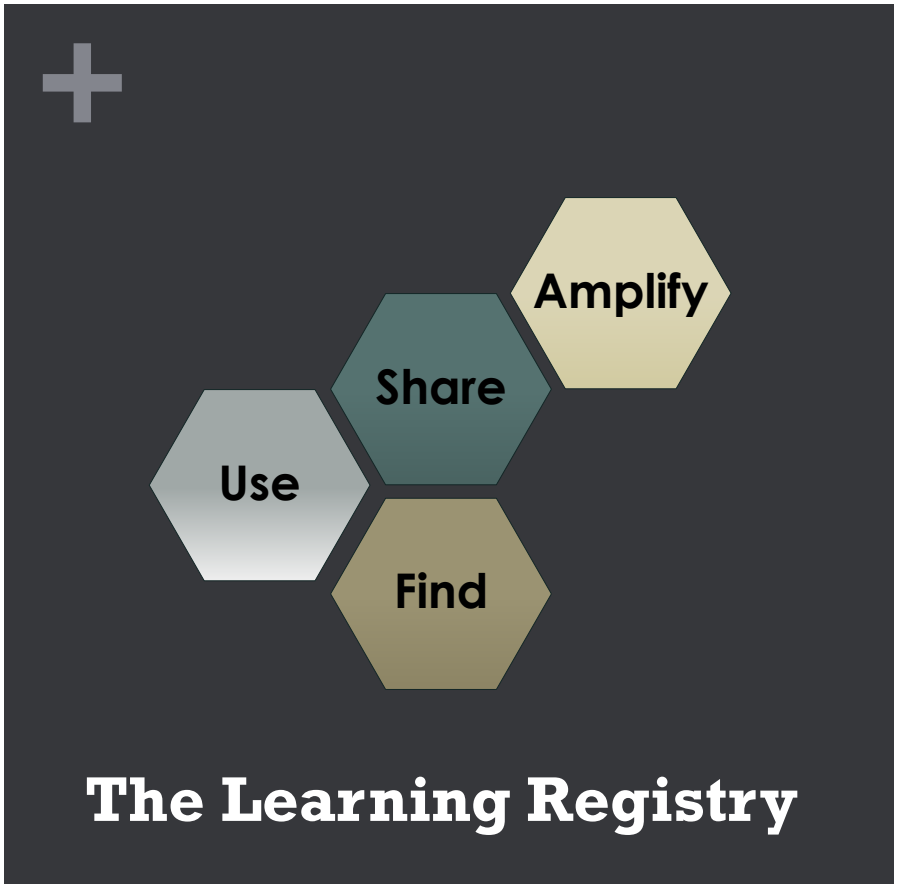
The Learning Registry

Collaboration between OSD Training Readiness & Strategy (TRS) & Department of Education

Paul Jesukiewicz
Principal
Booz Allen Hamilton

Learning Ecosystem





Social Networking for Metadata

@learningreg

#learningreg

learningregistry.org

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The Problem

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An abundance of content,
a lack of data sharing,
lost data exhaust,
limited feedback,
a legacy environment.

We don't know what content has a positive effect on learning.

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A concept,
a research project,
a community project,
a codebase,
a public social metadata distribution network.

What is the Learning Registry?

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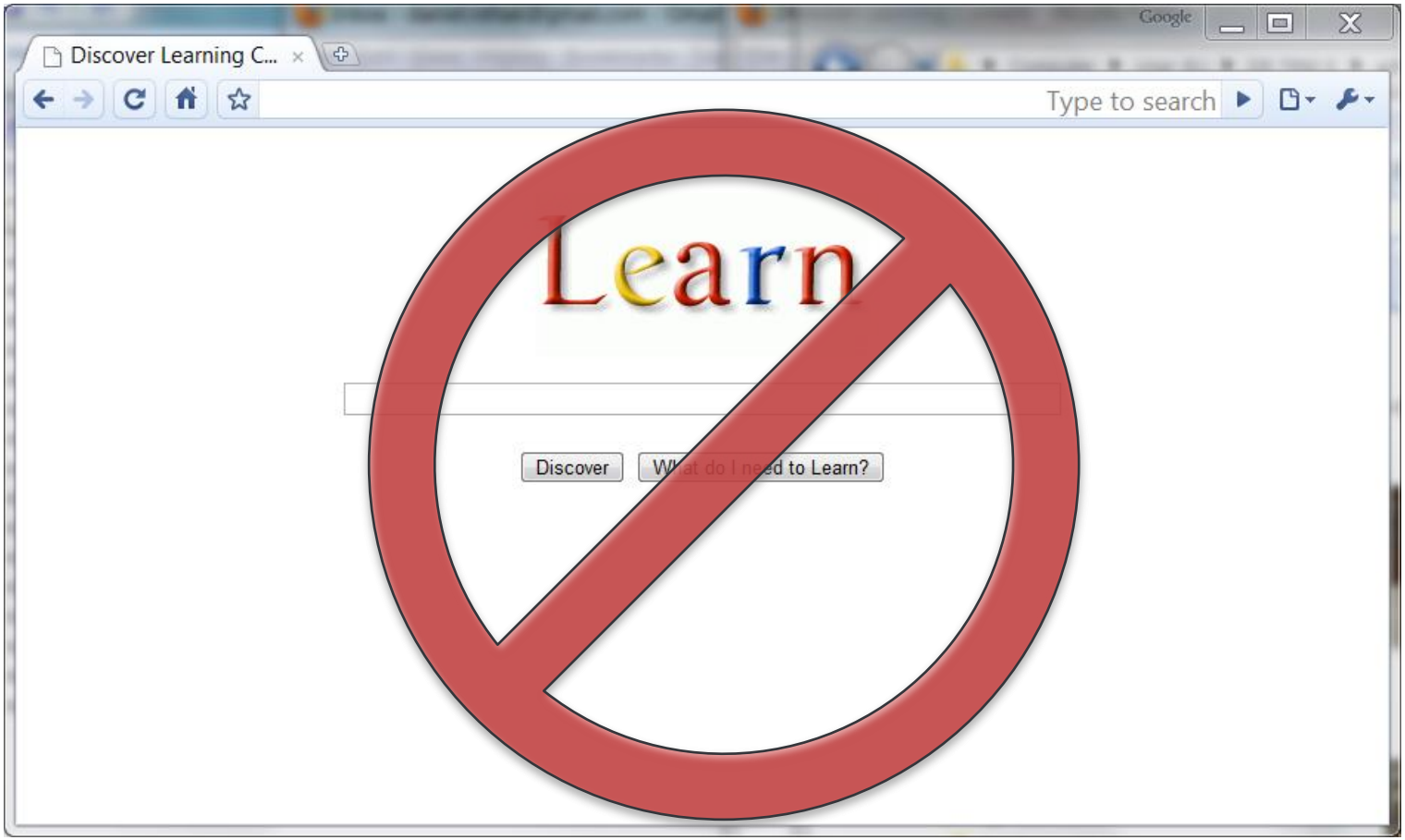
Enough Custom Portals



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We want to enable a learning layer on Web 2.0

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Innovate the infrastructure, not the interface.

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The Learning Registry Approach

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Be Enabling

- Provide capabilities not solutions
- Let anyone participate
- No default “winners”
- No single point of failure or control
- Anyone can provide information on anything
- Identity and trust exist
- Re-aggregation and sharing is natural
- Usage/utility is shared
- As simple as possible

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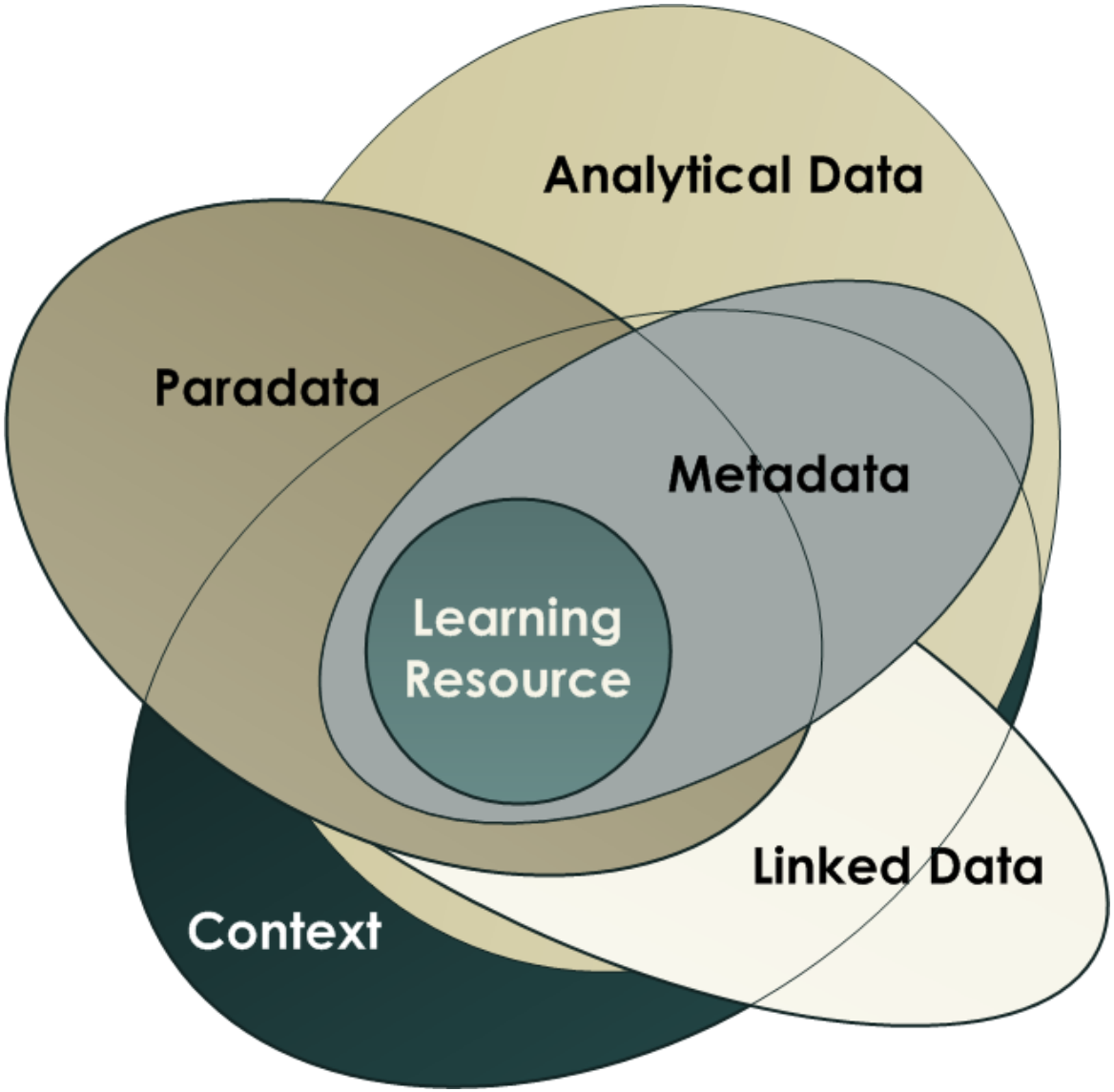
Resources, Context, Data +



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Knowledge Amplification

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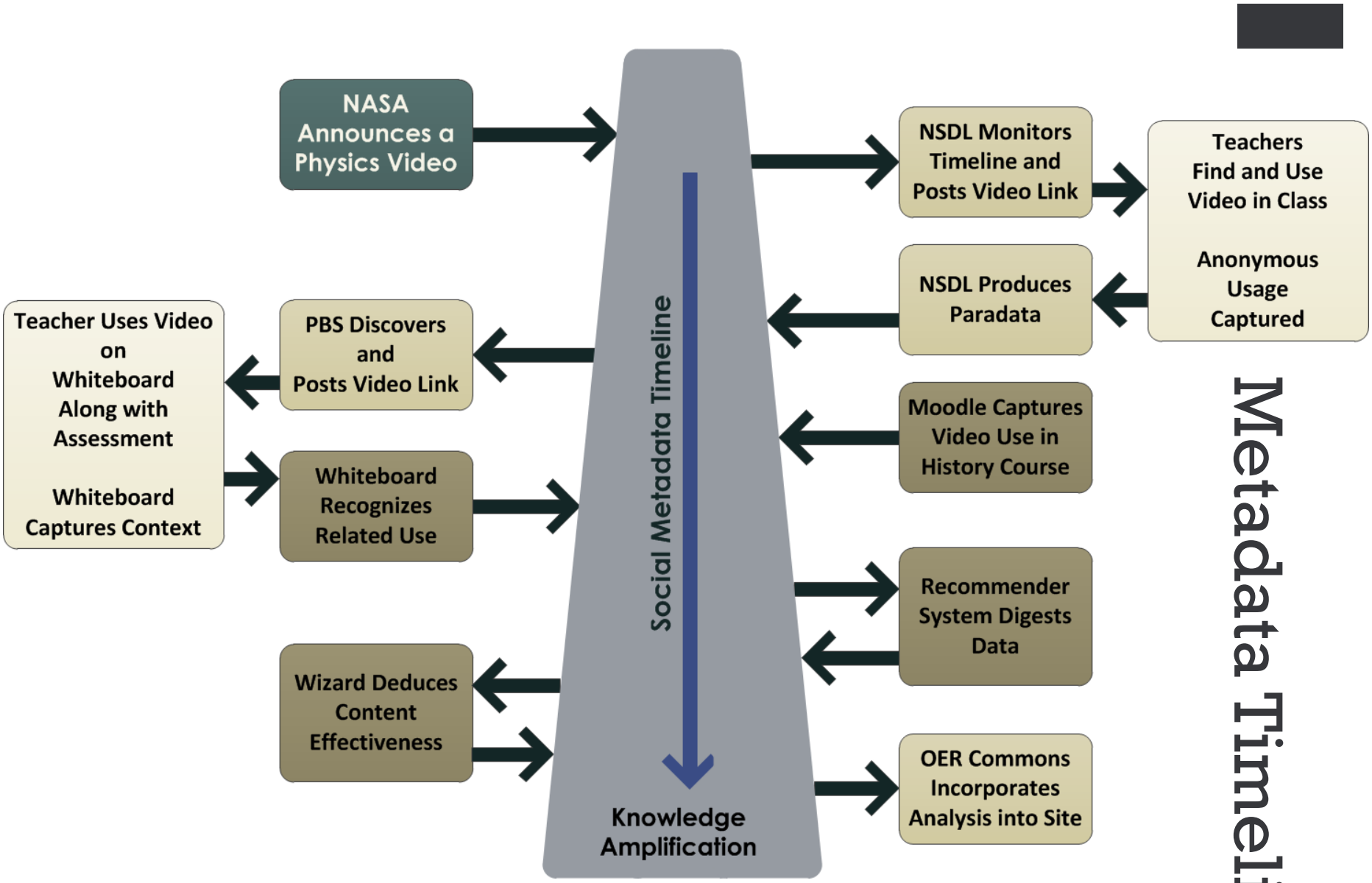

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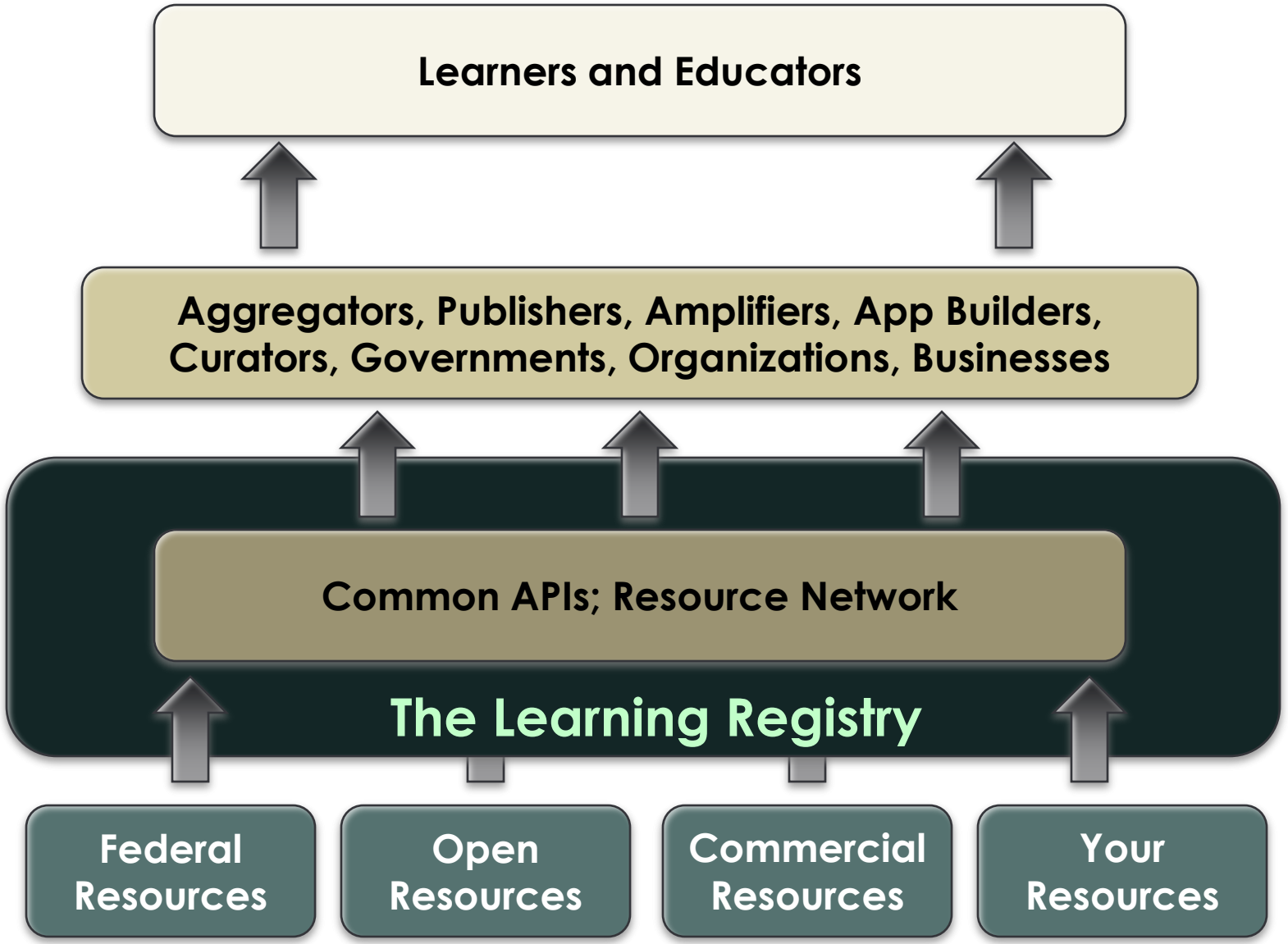
Learning Registry Stack



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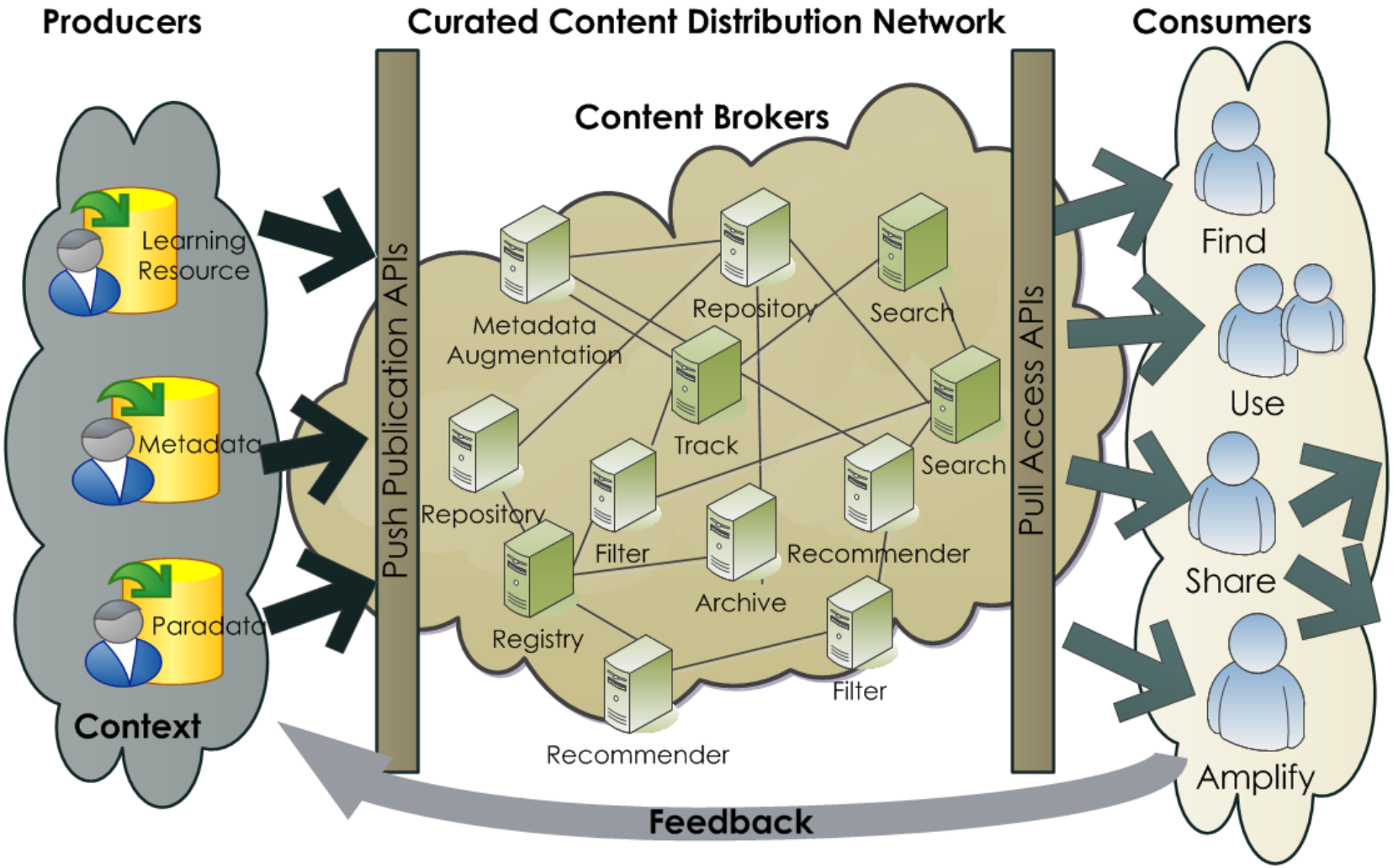

Transport Network

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Learning Registry Resource Data

- Resource Locator (resource identity: URL)
- Who's providing the data (identity: submitter, owner, curator)
- Terms of service (URL, optional)
- Digital Signature (OpenPGP, for trust)
- Hashtags (recommended)
- Formal "metadata" (optional, any schema)
- Workflow stuff (message IDs, versions, times, transit nodes)

- In JSON, Document-oriented, schema-free database

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Learning Registry APIs

- Publish (push from user)
  - Publish
  - SWORD
  - 3rd party OAI-PMH Utility (We don't harvest)
- Access (pull to get data)
  - Obtain (by ID, record, by URL)
  - Harvest (JSON or OAI-PMH)
  - Slice (subset by identity, schema, keyword)
- Distribute (node-to-node, with regex "filtering")
- Admin (status, discovery, …)
- NO Search/Query API!

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Prototype Implementation

- RESTful APIs
- Data-driven policies and descriptions
- CouchDB (NoSQL) storage and master-master replication
- Map-Reduce views
- Python Apps layer
  - Abstracts Couch
- Test and development network
- Public production network; Amazon EC2 hosted

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Our Process

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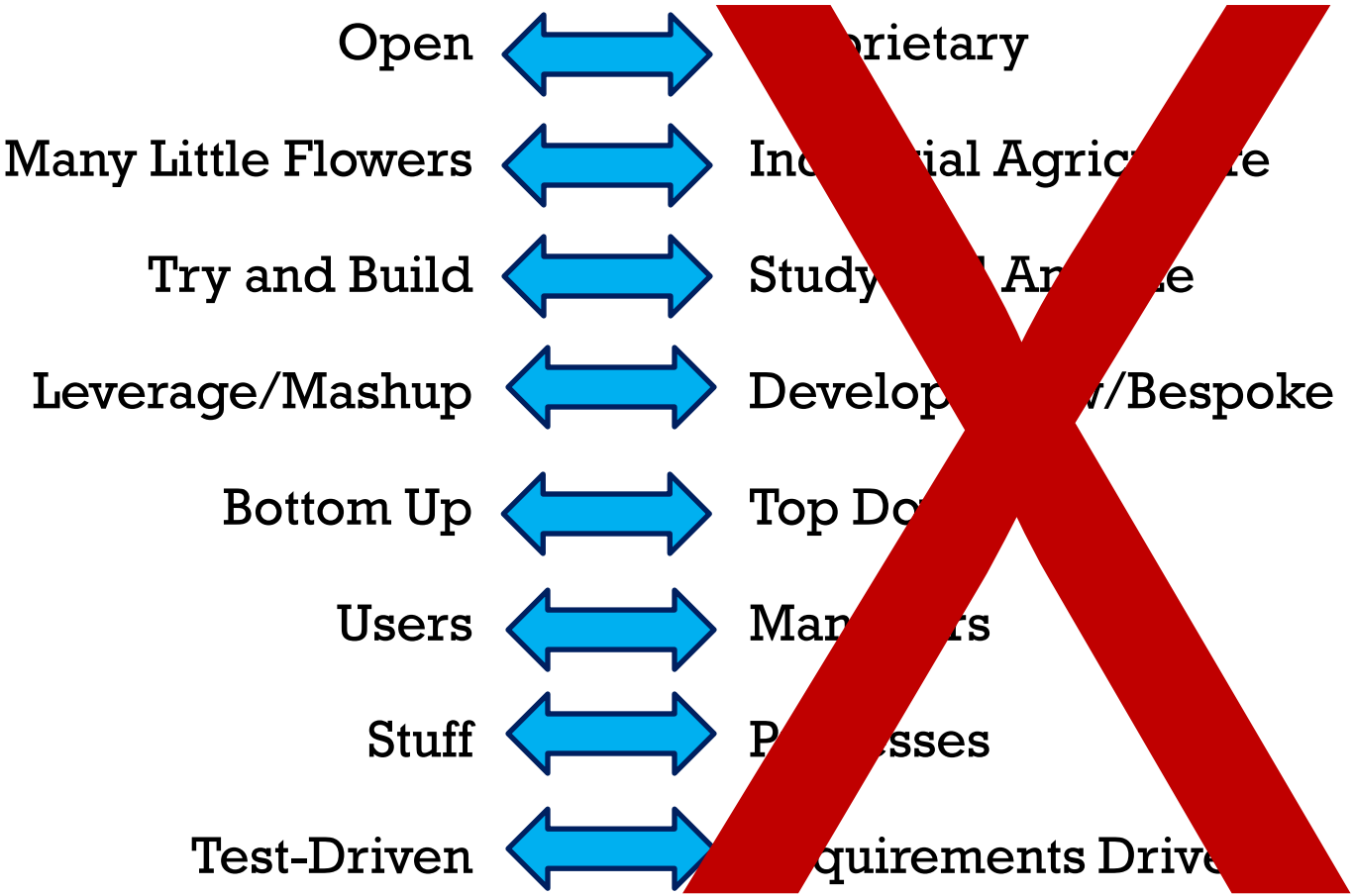
Design Principles



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Open processes,
open data,
open products,
open standards.

Openness.

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Participation

- Be Part of the Community
  - Be a provider (learning resources, metadata, paradata, analytic data)
  - Be a consumer
  - Help amplify
  - Operate a node
  - Build value-added services
- Help Build the Model and Network
  - Discuss on open fora
  - Build and test tools, APIs, specifications

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Learning Registry Plugfest 1

- Held June 15th and 16th
- National & International Participation from Government, Industry, and Academia
- Hands-on coding, integration with LMS, authoring tools, registry and repository environments
- Plan to have Version 0.5 of code completed by Sept 2011

We'll welcome anyone who wants to make a difference.

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A ***Do-ocracy***: Just Do It.

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Federated Community

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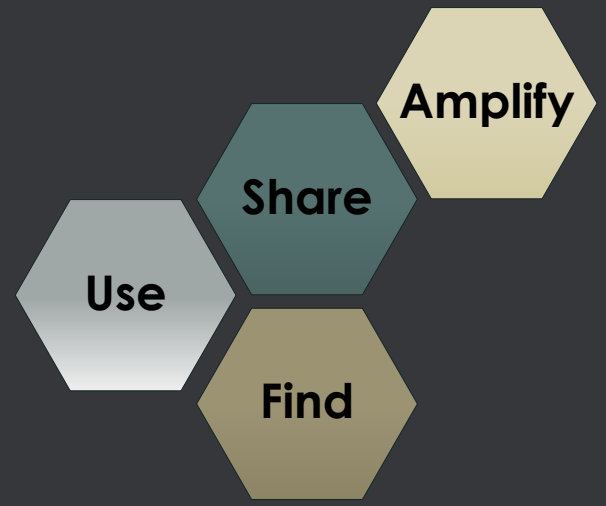

The Learning Registry

Thank You

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learningregistry.org

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